

March 21, 2001

**Andrew Roman  
Paramount Plastics, Inc.  
52790 C. R. 13 North  
Elkhart, Indiana 46514**

Re: Exempt Operation Status,  
**039-13658-00136**

Dear Mr. Roman:

The application from Paramount Plastics, Inc. received on December 21, 2000, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the following, to be located at 52790 C. R. 13 North, Elkhart, Indiana 46514, is classified as exempt from air pollution permit requirements:

The source consists of the following permitted emission units and pollution control devices:

- (1) One (1) Natural gas fired rotary heater, capacity 0.60 MMBtu/hr, burned gas exhausting through wall fan # 7, 2 feet diameter, 17 feet above the floor level, without emission control units.
- (2) Twelve (12) Gas heaters (space) of total capacity 1.70 MMBtu/hr, exhausting through stacks # 16 through # 27 (average stacks height 20 feet), without emission control units.
- (3) Four (4) Tube heaters of total capacity 0.40 MMBtu/hr, exhausting through stacks # 12 through # 15 (average stack height 20 feet), without emission control units.
- (4) One (1) spray booth for spraying plastic resin on molds, air atomizer and airless spray system, using batting filters to control emissions with an efficiency of 97%, the exhaust passing through the stack # 4, 3 feet height above the ground level (stack in the side wall) and 2 feet diameter, exhaust flow rate 8780 acfm and discharge temperature is 70 °F.
- (5) One (1) spray booth for spraying adhesive on plastic, low pressure air atomizer system, using filters to control emissions with an efficiency of 97%, the exhaust passing through the stack # 11, 24 feet height above the ground level and 2 feet diameter, exhaust flow rate 8780 acfm and discharge temperature is 70 °F

The following conditions shall be applicable:

- (1) Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

326 IAC 6-3-2 (Process Operations)

Pursuant to 326 IAC 6-3-2 (Process Operation the particulate matter (PM) from the spray paint booth shall not exceed the pound per hour emission rate established as E in the following formula. Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where E = rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The control equipments shall be in operation at all times during operation of the project, in order to comply with this limit.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Quality

MZK

cc: File - Elkhart County  
Elkhart County Health Department  
Air Compliance - Greg Windstorm  
Permit Tracking - Janet Mobley  
Technical Support and Modeling - Michele Boner  
Compliance Data Section - Karen Nowak

# **Indiana Department of Environmental Management Office of Air Quality**

## **Technical Support Document (TSD) for an Exemption**

**Source Name:** Paramount Plastics, Inc.  
**Source Location:** 52790 C. R. 13 North Elkhart, IN 46514  
**County:** Elkhart  
**SIC Code:** 3079  
**Operation Permit No.:** 039-13658-00136  
**Permit Reviewer:** Mohammad Z Khan

The Office of Air Quality (OAQ) has reviewed an application from Paramount Plastics, Inc. relating to the manufacturing of plastic door panels, window frames, recreational vehicle and marine interior component parts and applying surface coatings of resin and adhesive on plastics.

### **Permitted Emission Units and Pollution Control Equipment**

The source consists of the following permitted emission units and pollution control devices:

- (1) One (1) Natural gas fired rotary heater, capacity 0.60 MMBtu/hr, burned gas exhausting through wall fan # 7, 2 feet diameter, 17 feet above the floor level, without emission control units.
- (2) Twelve (12) Gas heaters (space) of total capacity 1.70 MMBtu/hr, exhausting through stacks # 16 through # 27 (average stacks height 20 feet), without emission control units.
- (3) Four (4) Tube heaters of total capacity 0.40 MMBtu/hr, exhausting through stacks # 12 through # 15 (average stack height 20 feet), without emission control units.
- (4) One (1) spray booth for spraying plastic resin on molds, air atomizer and airless spray system, using batting filters to control emissions with an efficiency of 97%, the exhaust passing through the stack # 4, 3 feet height above the ground level (stack in the side wall) and 2 feet diameter, exhaust flow rate 8780 acfm and discharge temperature is 70 °F.
- (5) One (1) spray booth for spraying adhesive on plastic, low pressure air atomizer system, using filters to control emissions with an efficiency of 97%, the exhaust passing through the stack # 11, 24 feet height above the ground level and 2 feet diameter, exhaust flow rate 8780 acfm and discharge temperature is 70 °F

### **Existing Approvals**

The source has been operating under previous registration issued on February 25, 1992. The source submitted an application for the renewal of registration to OAQ on December 21, 2000.

### **Enforcement Issue**

There are no enforcement actions pending.

## Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
4 (Stack through side wall)	Spray Resin Molds	3	2	8780	70
11	Spray Adhesive Booth	24	2	8780	70
12 to 15	Tube heaters	20	N/A	N/A	N/A
16 to 27	Gas heaters	20	N/A	N/A	N/A

## Recommendation

The staff recommends to the Commissioner that the operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. The application for the purposes of this review was received on December 21, 2000.

## Emission Calculations

See Appendix A of this document for detailed emissions calculations ( 6 pages).

## Potential To Emit (of Source or Revision) Before Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential To Emit (tons/year)
PM/PM-10	2.69
SO <sub>2</sub>	0.00
VOC	7.88
CO	1.00
NO <sub>x</sub>	1.20

HAP's	Potential To Emit (tons/year)
Di-methyl phthalate	0.13
Methyl ethyl ketone(MEK)	1.25
Styrene	4.66
Toluene	1.78
Tetrahydrofuran	0.72
<b>TOTAL</b>	<b>8.54</b>

The potential to emit (as defined in 326 IAC 2-7-1(29)) of VOC are less than 10 tons per year. The single HAP is less than 10 tons per year and the combination of HAPs are less than 25 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-1.1-3 and an exemption will be issued to the source.

## County Attainment Status

The source is located in Elkhart County.

Pollutant	Status ( <b>attainment, maintenance attainment, or unclassifiable; severe, moderate, or marginal nonattainment</b> )
PM-10	Attainment
SO <sub>2</sub>	Attainment
NO <sub>x</sub>	Attainment
Ozone	Maintenance
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Elkhart County has been designated as maintenance attainment for ozone. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Elkhart County has been classified as attainment or unclassifiable for PM-10, SO<sub>2</sub>, NO<sub>x</sub>, CO and Lead. Therefore, these emissions were reviewed pursuant to the requirement for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Fugitive Emissions  
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

## Source Status

Existing Source PSD, Part 70 or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM/PM-10	0.28
SO <sub>2</sub>	0.00
VOC	7.88
CO	1.00
NO <sub>x</sub>	1.20
Single HAP	4.66
Combination of HAPs	8.54

- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.

## Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This status is based on all the air approvals issued to the source. This status has been verified by the OAQ inspector assigned to the source.

### **Federal Rule Applicability**

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

### **State Rule Applicability**

#### **326 IAC 2-6 (Emission Reporting)**

This source is located in Elkhart County and it has the potential to emit (PTE) less than 10 (ten) tons per year of VOC. Therefore, this rule does not apply.

#### **326 IAC 5-1 (Visible Emissions Limitations)**

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

### **State Rule Applicability - Individual Facilities**

#### **326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))**

The operation of the spray paint booths will emit less than 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

#### **326 IAC 6-3-2 (Process Operations)**

Pursuant to 326 IAC 6-3-2 (Process Operation the particulate matter (PM) from the spray paint booth shall not exceed the pound per hour emission rate established as E in the following formula. Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The control equipments shall be in operation at all times during operation of the project, in order to comply with this limit.

#### **326 IAC 8-1-6 (General provisions relating to VOC rules):**

This source is operating after January 1, 1980 and potential emission are not more than 25 tons per year. Therefore, this rule does not apply.

## Conclusion

The operation of manufacturing plastic door panels, window frames, recreational vehicle and marine interior component parts, trucks, applying surface coatings of resin and adhesive on the plastics shall be subject to the conditions of the attached proposed **Exemption 039-13658-00136**.

## VOC and Particulate

## From Surface Coating Operations

Manufacturer of RV, Truck, Marine Interior Component Parts

Company Name: Paramount Plastics, Inc.

Address City IN Zip: 52790 C.R. 13 North, Elkhart, IN 46514

CP: 039-13658

Pit ID: 039-00136

Reviewer: Mohammad Khan

Date: January 31, 2001

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
<b>Spray Booths</b>																
Bostik 7132 M	7.7	79.60%	0.0%	79.6%	0.0%	15.00%	0.01000	12.500	6.09	6.09	0.76	18.27	3.33	0.00	40.60	100%
Boscudur 4F(Ad)	7.7	62.70%	0.0%	62.7%	0.0%	37.00%	0.00047	12.500	4.83	4.83	0.03	0.68	0.12	0.00	13.07	100%
<b>Molds</b>																
Catalyst	9.7	2.00%	0.0%	2.0%	0.0%	98.00%	0.06000	0.100	0.19	0.19	0.00	0.03	0.01	0.25	0.20	
Primer	10.8	33.00%	0.0%	33.0%	0.0%	67.00%	0.50000	0.100	3.56	0.66	0.03	0.79	0.14	1.58	5.32	

## State Potential Emissions

Add worst case coating to all solvents

0.82

19.77

3.61

1.83

## Actual Emissions (3120 hrs. in a year)

1.30

## METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) \* Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) \* Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (8760 hr/yr) \* (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) \* (gal/unit) \* (lbs/gal) \* (1- Weight % Volatiles) \* (1-Transfer efficiency) \*(8760 hrs/yr) \*(1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) \* Weight % organics) / (Volume % solids)

Total = Worst Coating + Sum of all solvents used



**Appendix A: Emission Calculations**  
**Natural Gas Combustion Only**  
**MMBTU/HR <100**

**Heaters**

**Company Name:** Paramount Plastics, Inc.  
**Address City IN Zip:** 52790 C. R. 13 North Elkhart, IN 46514  
**CP:** 039-13658  
**Pit ID:** 039-00136  
**Reviewer:** Mohammad Z Khan  
**Date:** February 01, 2001

Heat Input Capacity  
MMBtu/hr

Potential Throughput  
MMCF/yr

2.7

23.7

Pollutant						
Emission Factor in lb/MMCF	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.0	0.1	0.0	1.2	0.1	1.0

\*PM emission factor is filterable PM only. PM10 emission factor is condensable and filterable PM10 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100 MMBtu/hr, Low NOx Burner = 50, Flue gas recirculation = 32

(See Table 1.4-1)

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-01-006-01, 1-01-006-04

(AP-42 Supplement D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 2 for HAPs emissions calculations.

**Appendix A: Emission Calculations****Natural Gas Combustion Only****MMBTU/HR <100****Manufacturer of RV, Truck, Marine Interior Component Parts****HAPs Emissions****Company Name:** Paramount Plastics, Inc.**Address City IN Zip:** 52790 C.R. 13 North, Elkhart,, IN 46514**CP:** 039-13658**Pit ID:** 039-00136**Reviewer:** Mohammad Z Khan**Date:** February 01, 2001**HAPs - Organics**

Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	2.48E-05	1.42E-05	8.87E-04	2.13E-02	4.02E-05

**HAPs - Metals**

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	5.91E-06	1.30E-05	1.66E-05	4.49E-06	2.48E-05

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

<b>(A)</b>	<b>Capacity</b>	MMBtu/hr
	One Rotary Heater	: 0.600
	12 Gas (space) Heater	: 1.700
	4 Tube Heater	: 0.400
<b>Total</b>		<b>: 2.700 MMBtu/hr.</b>

**(B) Total Emissions Tons/ Year (SUMMARY):**

	<b>**</b> PM/PM-10	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>
Heaters (Gas)	0.10	0.0	0.10	1.00	1.20
Open molding operations	0.757	0.0	4.17	0.0	0.0
Paint Booths	1.83	0.0	3.61	0.0	0.0
<b>Totals</b>	<b>2.69</b>	<b>0.0</b>	<b>7.88</b>	<b>1.00</b>	<b>1.20</b>

\*\*PM/PM-10 Control Efficiency is 97%. Therefore, **PM/PM-10 is 0.28 Tons/Year after control.**

**(C) HAPs Emissions**

Name	Emissions Points	Emissions Rate (Tons/Yr)
Di-methyl phthalate	4	0.13
Methyl ethyl Ketone(MEK)	4, 11	1.25
Styrene	4	4.66
Tetrahydrofuran	--	0.72
Toluene	11	1.78
<b>Total</b>		<b>8.54</b>

**Appendix A: Emissions Calculations**  
**Form DD: Reinforced Plastics and Composites**  
**Open Molding Operations\***

**Company Name:** Pramount Plastics, Inc.  
**Address City IN Zip:** 2790 C. R. North, Elkhart, IN 46514  
**CP:** 039-13658  
**Pit ID:** 039-00136  
**Reviewer:** Mohammad Z Khan  
**Date:** February 8, 2001

Material	Units per Hour	Density of Resin (lb/gal)	Amount of Resin Used per Unit (gallons/unit)	Weight % Monomer	Emission Factor (% emitted of resin weight) (see Note 1)	Transfer Efficiency (%)	Pounds VOC per hour	Pounds VOC per day	Tons of VOC per Year	Tons of PM per year
<b>Non vapor suppressed</b>										
Styrene, 25% Hand	0.1	9.40	1.75	48.0%	8.4%	95%	0.138	3.316	0.605	0.187
Styrene, 75% Mech	0.1	9.40	5.25	48.0%	16.3%	95%	0.804	19.306	3.523	0.562
Gel Coat	0.1	9.40	0.06	35.0%	16.8%	95%	0.009	0.227	0.042	0.008
<b>Totals:</b>							<b>0.952</b>	<b>22.849</b>	<b>4.170</b>	<b>0.757</b>

\* Open Molding Operations include the following: manual application, mechanical application, gel coat application, and filament application.

For all other fiberglass operations, use the AP-42 emission factors and the calculation spreadsheet fbrglsap.wb3.

\*\*For this operation, it is assumed that 25% of the application is hand lay-up and 75% of the application is un-controlled spraying.

**METHODOLOGY**

Assume all of the monomer is styrene.

Potential VOC Pounds per Hour = Maximum (unit/hr) \* Density of Resin (lb/gal) \* Amount of Resin Used per Unit (gal/unit) \* Emission factor (% emitted of resin weight)

Potential VOC Pounds per Day = Potential VOC Pounds per Hour \* (24 hrs / 1 day)

Potential VOC Tons per Year = Potential VOC Pounds per Hour \* (8760 hr/yr) \* (1 ton / 2000 lbs)

PM Potential Tons per Year = Maximum (units/hour) \* Density of Resin (lb/gal) \* Amount of Resin Used per Unit (gal/unit) \* (1 - Weight % Volatiles/Monomer) \* (1 - Transfer efficiency) \* (8760 hr/yr) \* (1 ton / 2000 lbs)

Transfer Efficiency and Particulate emissions are only for spray type operations. Transfer efficiency is provided by the source.

Note 1: Calculate Emission Factors from the CFA Styrene Emissions Determination Model For Open Molding Operations (Version 3.1, July 1998).

The model is available in the S:\igcn\oam\common\manguide\insr-psm\calcs\calcs\noncombust folder as cfa.wb3.

The CFA model was originally in Excel but has been saved as a Quattro Pro file. The calculations still work, although the formatting isn't intact.

Hard copies of the CFA Model are available from Policy and Guidance.

**Appendix A: Emission Calculations**  
**HAP Emission Calculations**

**Company Name: Paramount Plastics Inc**  
**Address City IN Zip: 52790 C. R. 13 North, Elkhart, IN 46514**  
**CP #: 039-13658**  
**Plt ID: 039-00136**  
**Permit Reviewer: Mohammad Z Khan**  
**Date: February 14, 2001**

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % MEK	Weight % Toluene	Weight % Tetrahydro furan	Weight % Dimethyl Phthalate	Weight % Styrene	Weight % Methanol	MEK Emissions (ton/yr)	Toluene Emissions (ton/yr)	Tetrahydro furan Emissions (ton/yr)	Dimethyl Phthalate Emissions (ton/yr)	Styrene Emissions from Primer (ton/yr)	Methanol Emissions (ton/yr)
Bostik 7132 M	7.65	0.010000	12.50	20.00%	42.50%	17.10%	0.00%	0.00%	0.00%	0.84	1.78	0.72	0.00	0.00	0.00
Boscodur 4F	7.71	0.000470	12.50	62.70%	0.00%	0.00%	0.00%	0.00%	0.00%	0.12	0.00	0.00	0.00	0.00	0.00
Catalyst	9.7	0.060000	0.10	2.00%	0.00%	0.00%	50.00%	0.00%	0.00%	0.01	0.00	0.00	0.13	0.00	0.00
Primer	10.8	0.500000	0.10	12.00%	0.00%	0.00%	0.00%	20.89%	0.00%	0.28	0.00	0.00	0.00	0.49	0.00

Total State Potential Emissions	<b>1.25</b>	<b>1.78</b>	<b>0.72</b>	<b>0.13</b>	<b>0.49</b>	<b>0.00</b>
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**METHODOLOGY**

HAPS emission rate (tons/yr) = Density (lb/gal) \* Gal of Material (gal/unit) \* Maximum (unit/hr) \* Weight % HAP \* 8760 hrs/yr \* 1 ton/2000 lbs